

Mathematics 2412 – Pre-Calculus Section 002: Monday/Wednesday 2:30-4:35 PM Room: Agriculture 105, Levelland Campus

Course Information

Textbook	<i>Precalculus: A Right Triangle Approach</i> by Ratti, McWaters, and Skrzypek, 4 th edition, 2019, Pearson Education						
Materials	Pencils, 3 ring bi	Pencils, 3 ring binder, loose paper, and scientific calculator					
Description	This course covers the study of algebraic, polynomial, rational, exponential, logarithmic, and trigonometric functions as well as analytic geometry.						
Purpose	Acquaint student with solutions to different mathematical problems covering algebra, trigonometry, and analytic geometry.						
Requirements	A student should attend all class sessions, take notes, participate in class, complete all homework assignments, pass classroom quizzes, and pass examinations.						
Learning Outcomes	 Review basic concepts of Algebra Solve equations with inequalities Learn to graph functions Solve polynomial and rational functions Learn exponential and logarithmic functions Learn trigonometric function identities and solve applications Solve systems of equations Learn matrices and determinants Learn conic sections 						
<u>Grading</u>							
Weights	Homework Quiz Exam (4) Final Exam Total	10% 10% 15% each 20% 100%	Grading Scale	90-100 80-89 70-79 60-69 0-59	A B C D F		
Homework Assignments		lass without recei diness t class	-		ework will be collected at e accepted as follows.		

Quizzes Quizzes will be given once a week and will contain material pertaining to Homework and previous lecture material. No make-up quizzes will be allowed.

Exams Exams will cover material from Homework, Quizzes, and Lectures as indicated by the course itinerary. Examinations will be a combination of open answer, fill in the box, and/or multiple choice. Students need only bring pencils, lead, and erasers. No other material will be required unless stated in class.

Cell phones, smart watches, tablets, computers, etc. **are not allowed** and students will be asked to remove their device(s) or leave the class. Students seen with and using unapproved devices will receive an automatic 0 for the exam and be dropped.

Final ExamA comprehensive final exam will be given at the end of the semester. Failure to attempt the final
exam will result in a failing grade for the course. The final exam will be given on Tuesday May 7^h
2019 from 1:00-3:00 P.M. Conflicting test schedules must be worked out with instructors.

Classroom Policies

- **Disclaimer** The instructor reserves the right to amend any class policies as deemed necessary by the instructor or South Plains College and will announce any changes in class. If a student has any questions about a change in policy ask the instructor.
- **Computer** ABSOLUTELY NO FOOD ALLOWED. Drinks must have a threaded cap to be allowed and must be put away when not in use. Music devices during lab assignment times are acceptable. Each workstation must be cleaned and straightened before leaving the area.

ClassIn the event of class being canceled by the school/instructor, the student will be responsible for
the lecture material missed. The class will continue on the following class day. All information will
be on Blackboard and/or sent via email to be accessed by the student.

- AttendanceRecords of student attendance are maintained throughout the semester. Three absences, for any
reason, are allotted to the student for the semester. Tardies count as one-half of an absence and
will be applied for leaving early. Once this condition is exceeded, the instructor has the right to
drop the student with an F or X grade at their discretion.
- WithdrawalTo withdraw from this class, the student will need to go to the Admissions and Records office either
on the Levelland campus or the Reese Center campus, and fill out a drop notification form.
- **Email Policy** The instructor will only acknowledge, respond, and send emails to your assigned SPC email. This ensures the intended recipient receives all correspondence from the instructor.
- Final Grading
PolicyAll grades are rounded from the tenths place, e.g. 80.5 = 81, 80.49 = 80. Upon the submission of
grades at the end of the semester. ALL GRADES ARE FINAL
- **Returning** The instructor will attempt to return grades by the next class meeting; however, the instructor reserves the right to have at least one (1) week to grade assignments and post grades from the due date.
- Religious
 Section 51.911, Texas Education Code, South Plains College will allow a student who is absent from class for the observance of a religious holy day to take an examination or complete an assignment scheduled for that day within seven (7) calendar days after the absence. Students are required to file a written notification of absence with each instructor within the first fifteen (15) days of the semester (Friday, 14 September 2018) in which the absence will occur. Forms for this purpose are available in the Student Services Office along with instructions and procedures. "Religious holy days" means a holy day observed by a religion whose place of worship is exempt from property taxation under Section 11.20, Tax Code.

- DisabilitiesStudents with disabilities, including but not limited to physical, psychiatric, or learning disabilities,Statementwho wish to request accommodations in this class should notify the Disability Services Office early
in the semester so that appropriate arrangements may be made.
- **Diversity** The instructor will establish and support an environment that values and nurtures individual and group differences and encourages engagement and interaction. Understanding and respecting multiple experiences and perspectives will serve to challenge and stimulate everyone to learn about others, the larger world, and ourselves. By promoting diversity and intellectual exchange, we will not only mirror society as it is but also model society as it should and can be.
- **Sexual** It is important for students to know that all faculty members are mandated reporters of any incidents of sexual misconduct. Faculty cannot keep information about sexual misconduct confidential if students share that information. SPC offers advisors that students can confidentially seek out in the Health & Wellness Center. These advisors have the best interest in students and information can be accessed on campus or even in the local community.
- CampusCampus Concealed Carry Texas Senate Bill 11 (Government Code 411.2031, et al.) authorizesConcealedthe carrying of a concealed handgun in South Plains College buildings only by persons who haveCarrybeen issued and are in possession of a Texas License to Carry a Handgun. Qualified law
enforcement officers or those who are otherwise authorized to carry a concealed handgun in the
State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and South Plains
College policy, license holders may not carry a concealed handgun in restricted locations.
- AcademicStudents are expected to uphold the ideas of academic honesty; all work that is submitted forHonestygrading must be your own. Violation of this policy will result in an F for the assignment(s) and the
student dropped with an F. For more details on what is considered cheating, see the South Plains
College catalog.
- **Equal** South Plains College strives to accommodate the individual needs of all students in order to enhance their opportunities for success in the context of a comprehensive community college setting. It is the policy of South Plains College to offer all educational and employment opportunities without regard to race, color, national origin, religion, gender, disability, or age.
- Holiday/If a student has any pre-existing plans to travel during scheduled class times, the student must
inform the instructor no later than Wednesday, September 5th, 2018. Failure to properly inform
of any missed class will result in forfeiture of any graded class work with no allowable
replacement/make-up work.

RecordingStudents are not allowed to use recording devices such as audio or video during class unless
approved by the instructor

Course Itinerary Planned schedule; subject to change as necessary.

Week 1	January 14	Introduction, Math Notation, Chapter 1: Solving Single Variable Equations		
-	January 16	Complex Numbers, Inequalities, Absolute Values, Chapter 2: Coordinate Plane		
Week 2	January 21	Martin Luther King Holiday – No Class		
-	January 23	Graphing Properties, Equation of a Circle, Equation of Lines, Transformations		
Week 3	January 28	Inverse Functions, Function Algebra, Composite Functions, Evaluations		
	January 30	Chapter 3: Quadratic Functions – Solutions and Graphing, Radical Functions		
Week 4	February 4	Examination 1		
	February 6	Long/Synthetic Division, Polynomial Functions – Solutions and Graphing		
Week 5	February 11	Division by zero, Rational Functions – Solutions and Graphing		
	February 13	Chapter 4: Exponential Functions – Solutions and Graphing		
Week 6	February 18	Logarithm Functions – Solutions and Graphing, Inequalities		
	February 20	Chapter 5: Radian/Degree Angles, Right-Triangle Trig, Unit Circle		
Week 7	February 25	Trig Functions of Angles, Graphing Sine and Cosine		
	February 27	Examination 2		
Week 8	March 4	Graphing Tangent and other Trig Functions, Inverse Trig Functions		
	March 6	Chapter 6: Trig Identities, Sum and Difference Formulas		
Week 9	March 18	Double-Angle and Half-Angle Formulas, Product-to-Sum, Sum-to-Product		
	March 20	Solving Trig Equations 1 and 2		
Week 10	March 25	Chapter 7: Law of Sines and Cosines, Vectors and Dot Products		
	March 27	Direction and Magnitude, Polar Coordinates		
Week 11	April 1	Examination 3		
	April 3	Chapter 8: Systems of Linear Equations with Two Variables		
Week 12	April 8	Systems with Three Variables, Partial-Fraction Decomposition		
	April 10	Systems of Nonlinear Equations, Systems of Inequalities		
Week 13	April 15	Chapter 9: Matrices and Systems of Equations		
	April 17	Matrix Algebra, Inverse Matrix, Determinants and Cramer's Rule		
Week 14	April 22	Easter Holiday – No Class		
	April 24	Examination 4		
Week 15	April 29	Chapter 10: Conics Overview, Parabolas OR Cal 1 Preview		
-	May 1	Final Examination Review		
Week 16	May 7	Final Exam: 1:00-3:00 P.M		